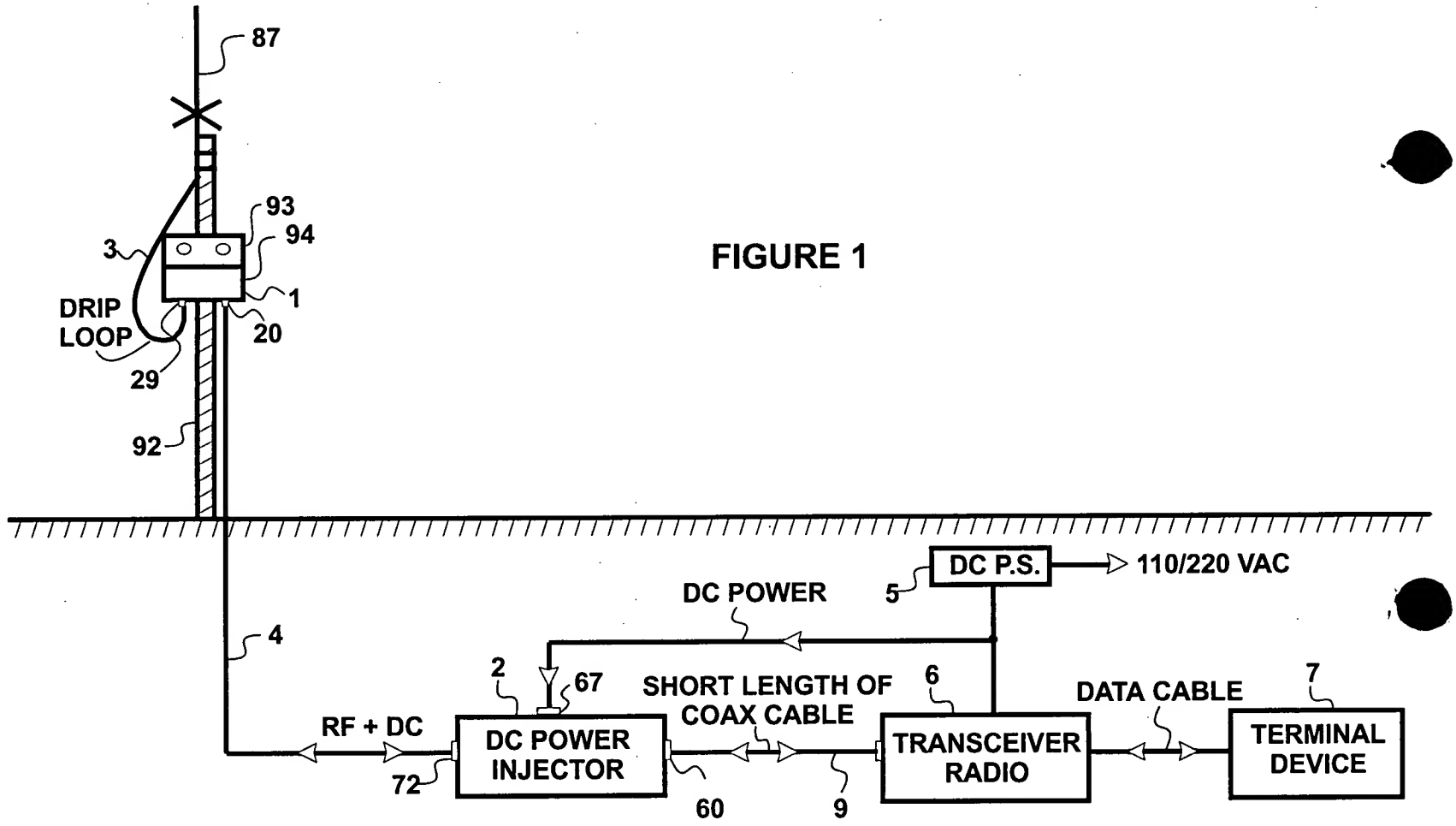

87
93
94
3
1
DRIP
LOOP
20
29
92
4
DC P.S.
110/220 VAC
5
DC POWER
2
67
SHORT LENGTH OF
COAX CABLE
6
DATA CABLE
7
RF + DC
DC POWER
INJECTOR
TRANSCEIVER
RADIO
TERMINAL
DEVICE
72
60
9

FIGURE 1

FIGURE 2

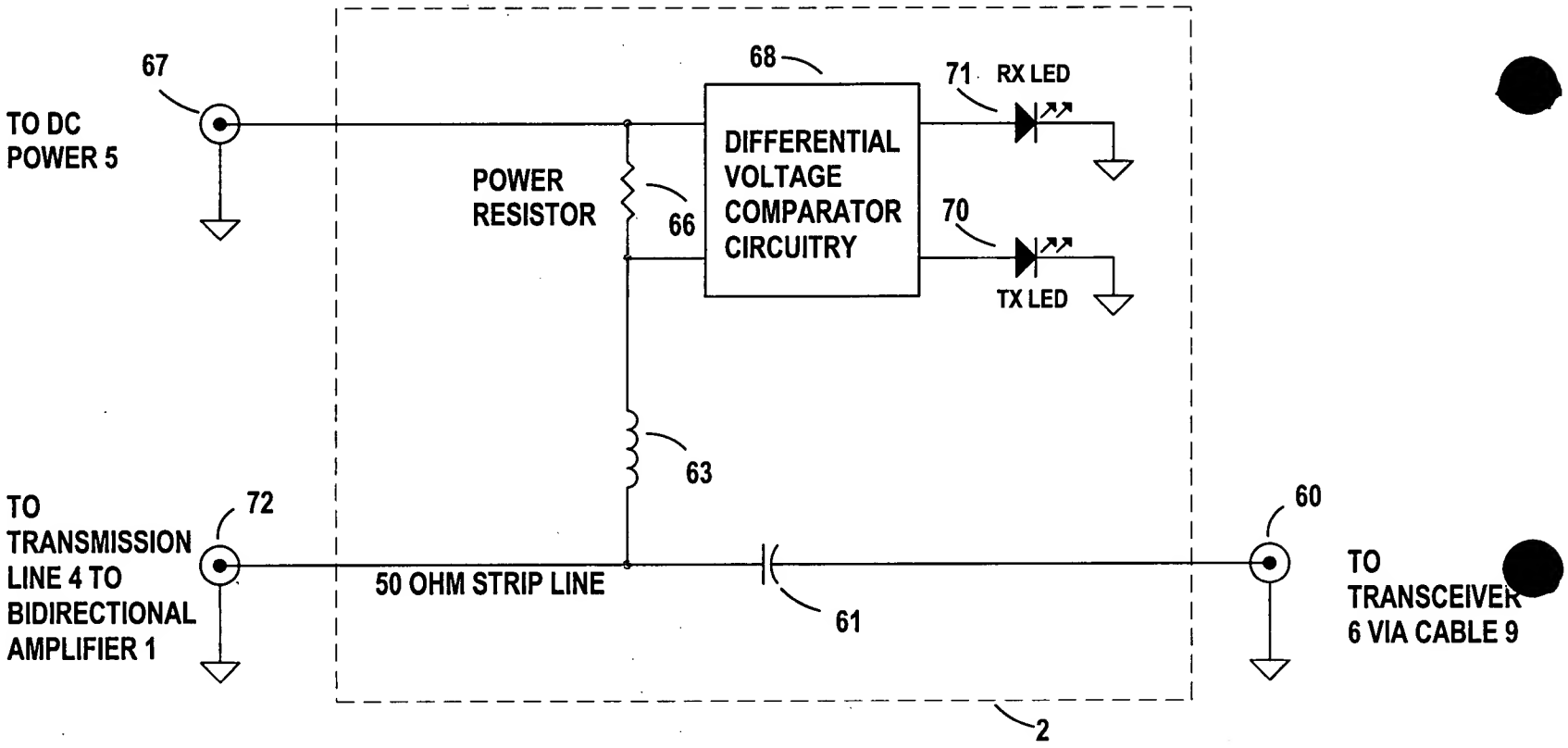

67
TO DC POWER 5
68
71
RX LED
DIFFERENTIAL VOLTAGE COMPARATOR CIRCUITRY
POWER RESISTOR
66
70
TX LED
63
72
TO TRANSMISSION LINE 4 TO BIDIRECTIONAL AMPLIFIER 1
50 OHM STRIP LINE
61
60
TO TRANSCEIVER 6 VIA CABLE 9
2

FIGURE 3

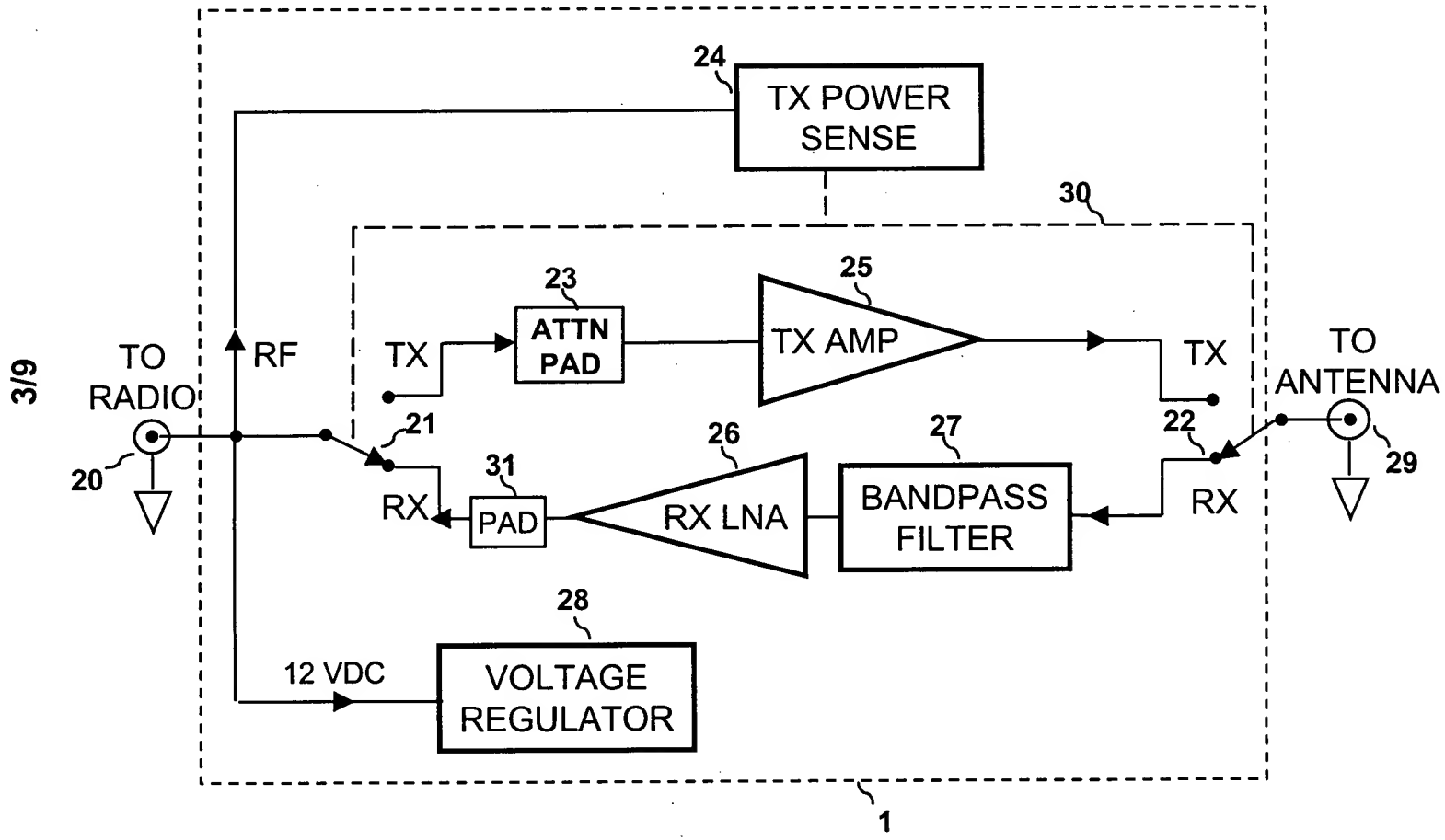
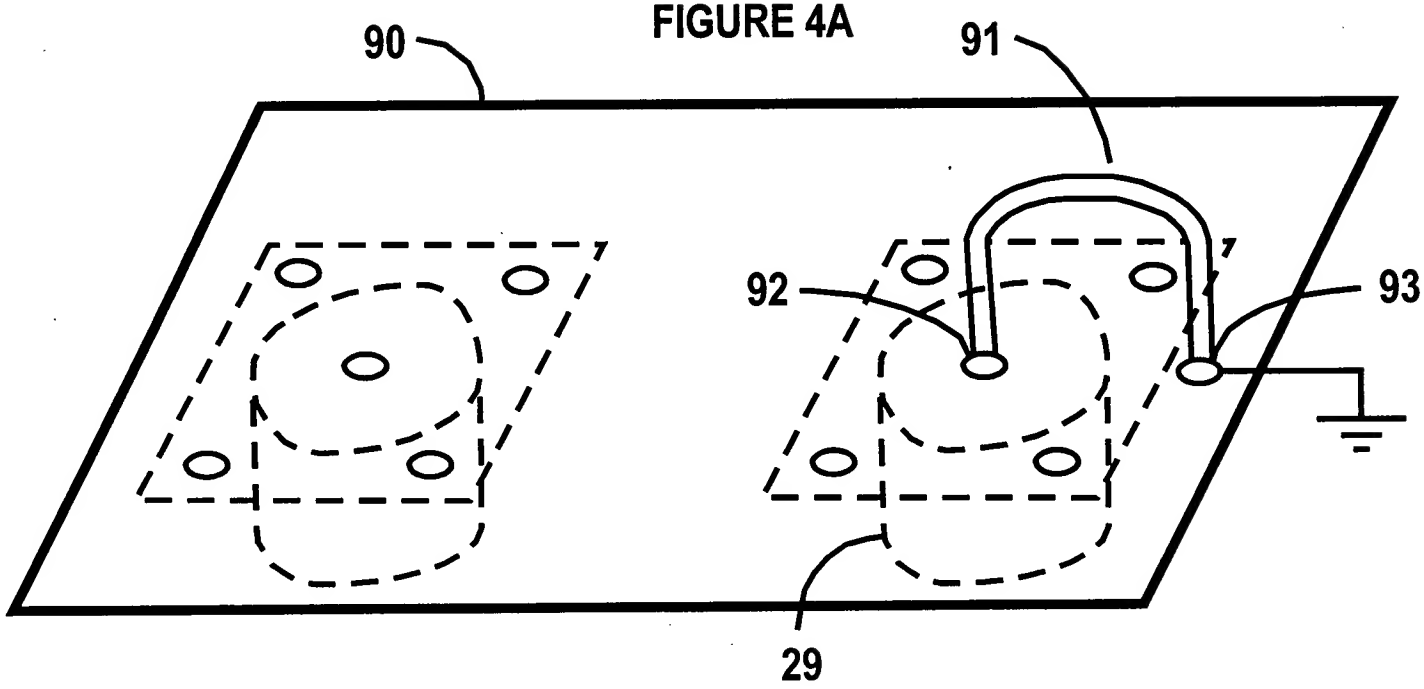

24
TX POWER SENSE
30
23
ATTN PAD
25
TX AMP
TO RADIO
RF
TX
TX
TO ANTENNA
21
22
20
26
27
29
31
RX
PAD
RX LNA
BANDPASS FILTER
RX
28
12 VDC
VOLTAGE REGULATOR
1

FIGURE 4A



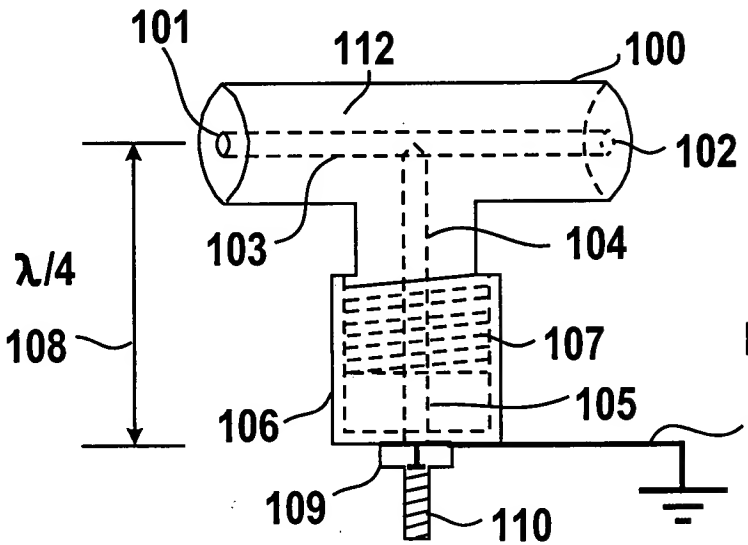




FIGURE 4B

FIGURE 5

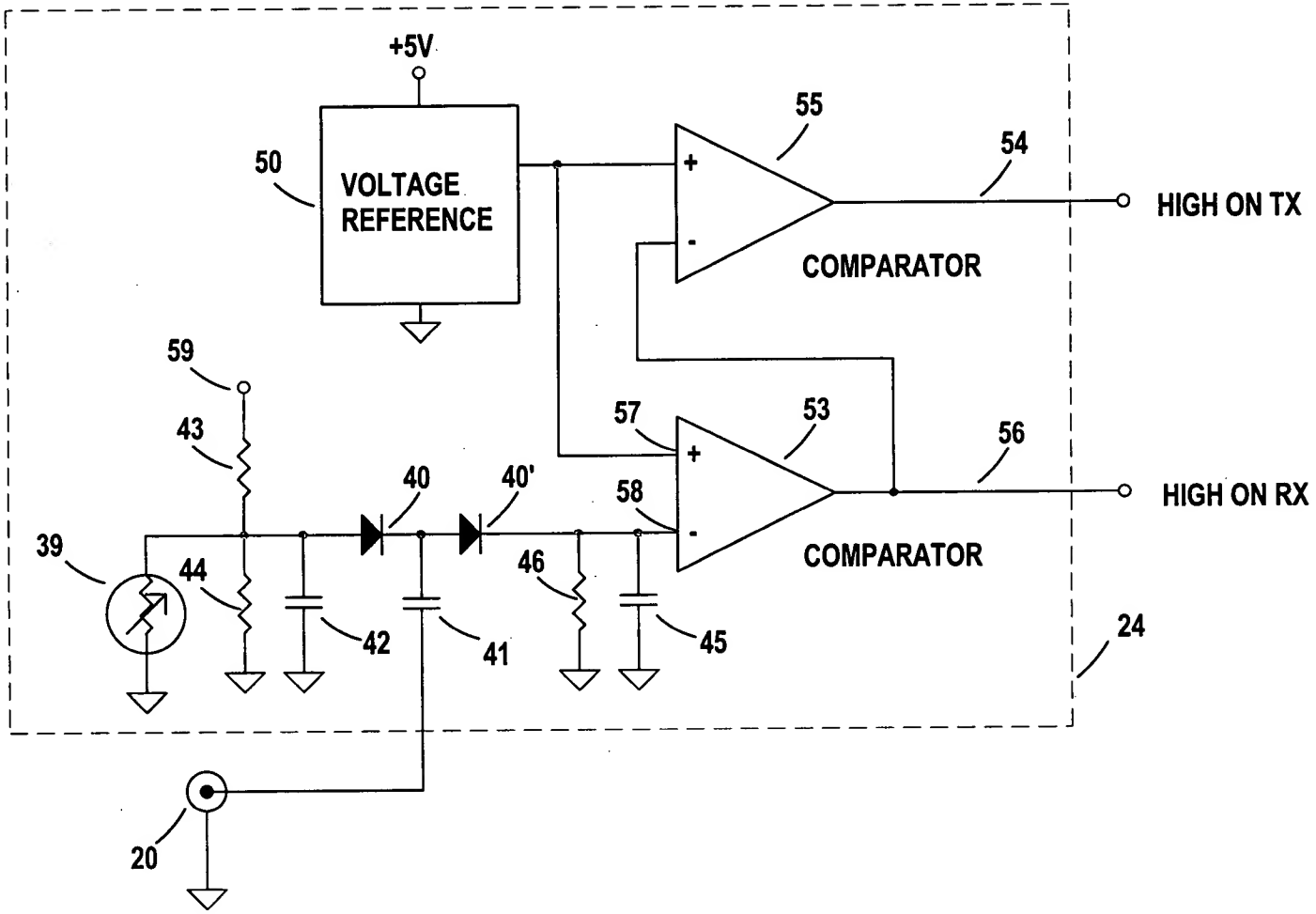
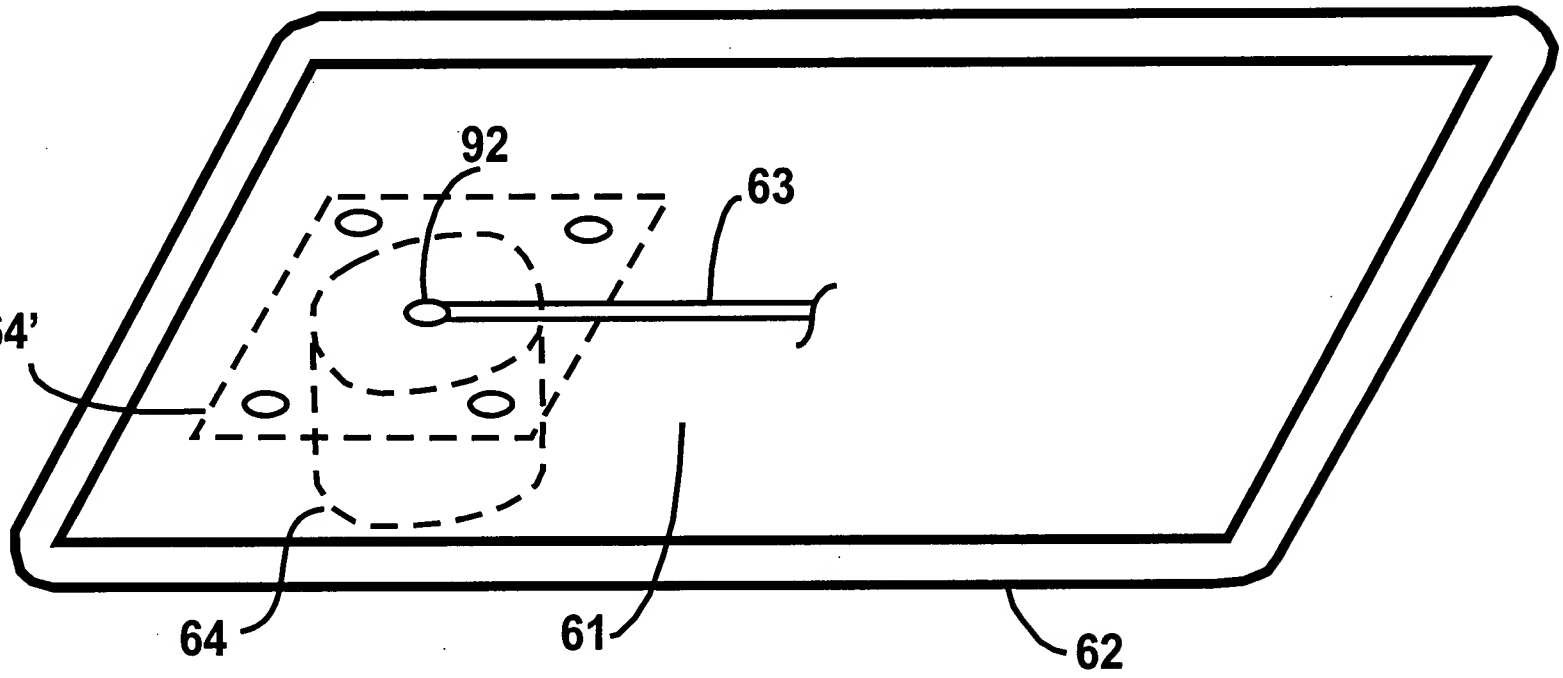

+5V
50
VOLTAGE REFERENCE
55
54
HIGH ON TX
COMPARATOR
59
43
57
53
56
HIGH ON RX
40
40'
58
39
44
46
COMPARATOR
42
41
45
24
20

FIGURE 6A



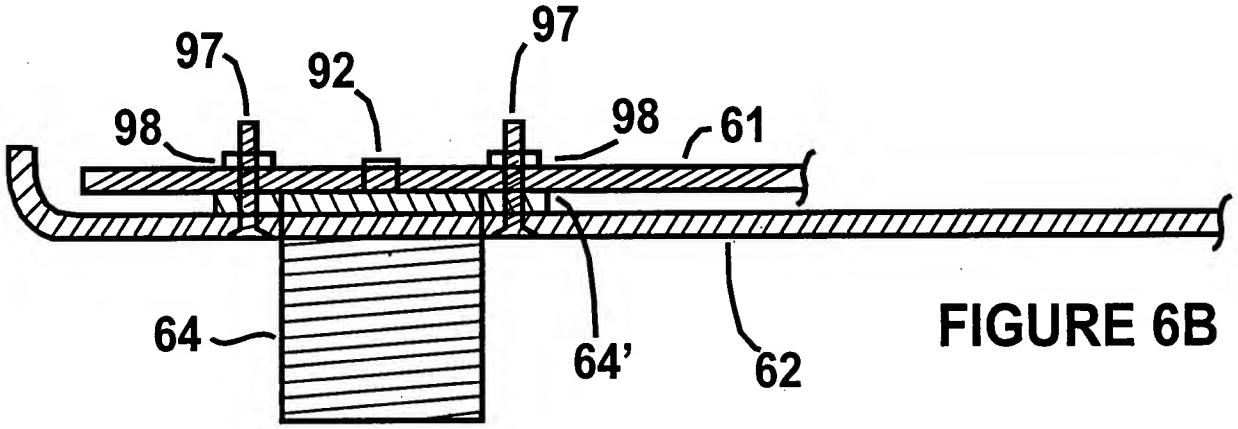




FIGURE 6B

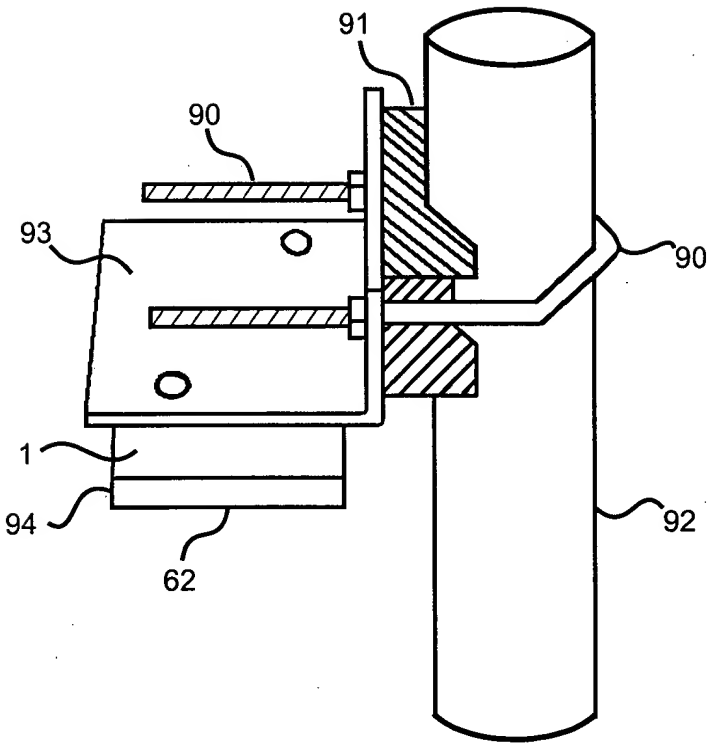



FIGURE 7

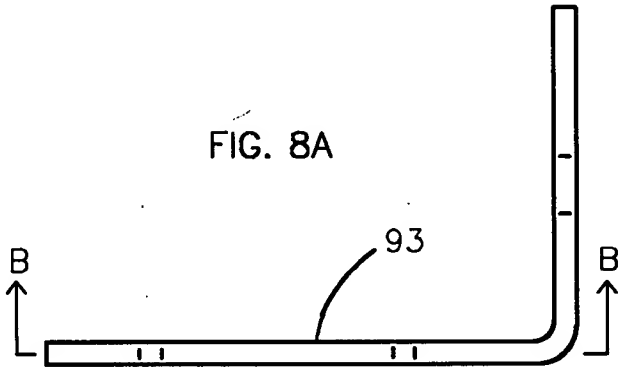



FIG. 8A

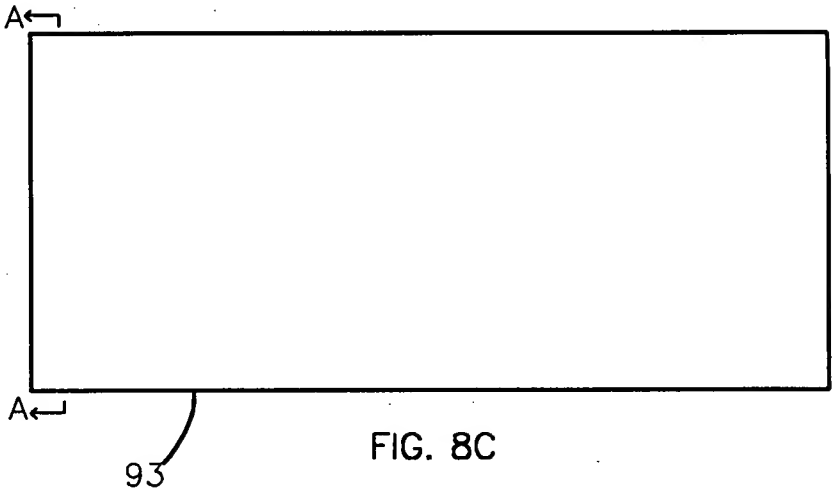



FIG. 8C

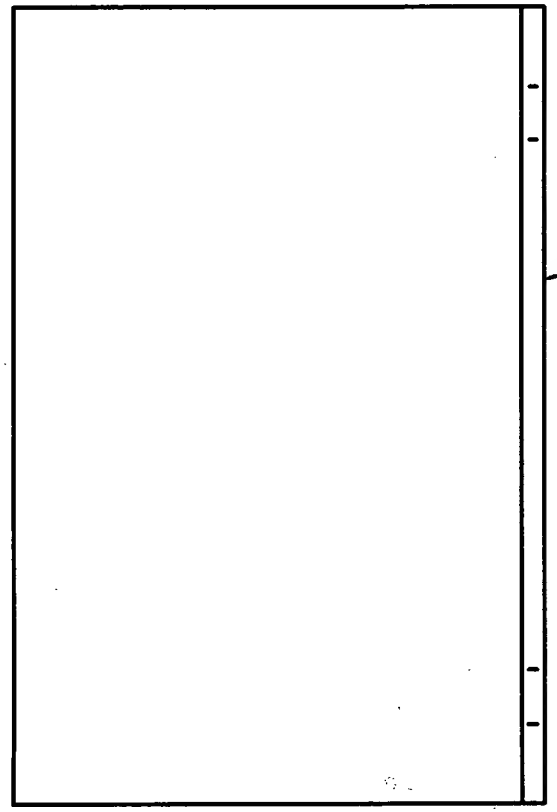



FIG. 8B

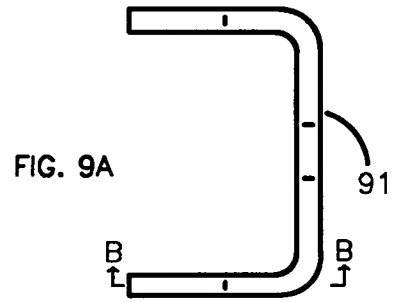



FIG. 9A

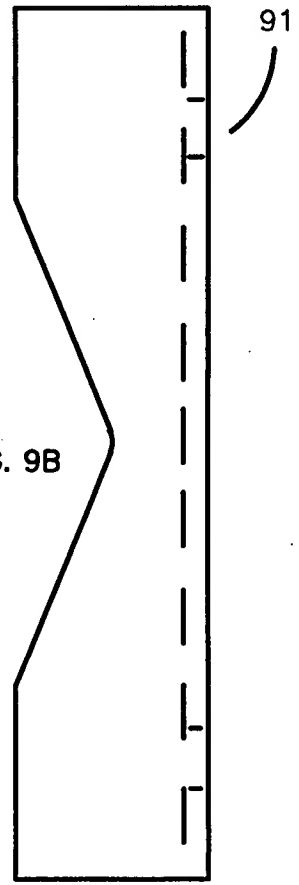



FIG. 9B

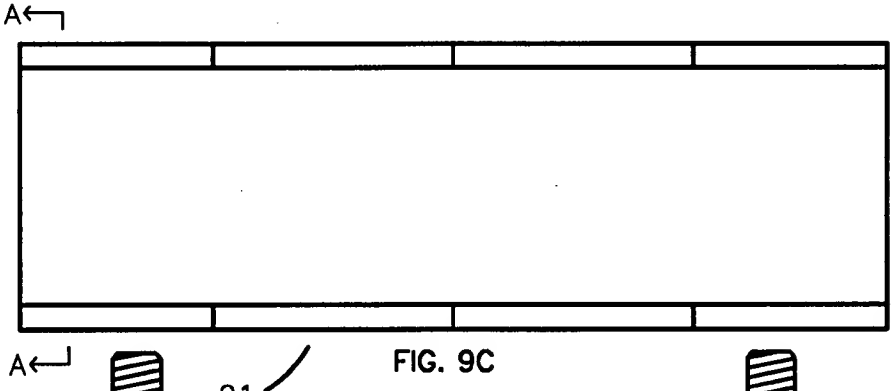



FIG. 9C

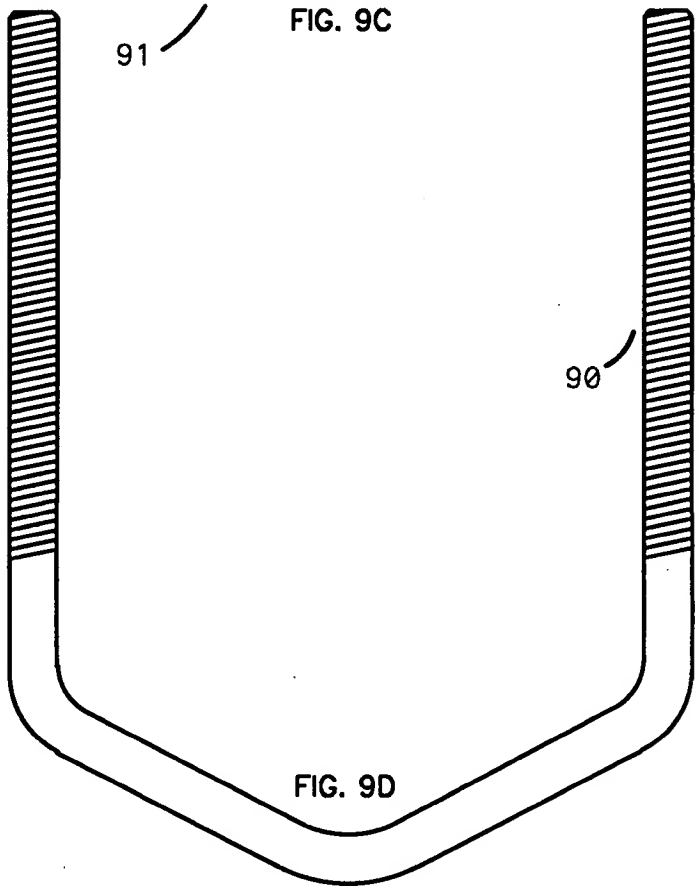



FIG. 9D